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#### THREE NEW AMERICAN BATS.

#### BY JAMES A. G. REHN.

#### Artibeus hercules n. sp.

Type.—No. 5,785, Collection of the Academy of Natural Sciences of Philadelphia.

Eastern Peru. Collected by John Hauxwell. Presented by E. D. Cope.

General Characters. — Allied to A. planirostris (Spix), but differing in the larger size, the much larger foot and in numerous dental characters.

Size.—This form is much larger than A. planirostris, its only ally. The foot averages at least two and a half millimeters longer, the forearm exhibits over five millimeters difference, and the tibia and metacarpus of the third finger are also more extensive, the former averaging three millimeters and the latter over six millimeters difference.

Foot.—The foot is very slender, in fact no wider than in A. planirostris, though averaging over two millimeters longer. The foot of planirostris is heavy and broad, the basal portion being the same length as in hercules, the difference in the latter being wholly in the length of the toes.

Color.—These specimens have been in alcohol for a number of years, and as a result the exact color of the membranes and fur cannot be ascertained. They appear much darker than in planirostris, but this is in all probability due to the preserving fluid.

Skull.—The single skull of A. hercules examined is that of a paratype and lacks the cranial portion. The anterior section of the skull is, as in accordance with the general characters, much larger and heavier, the palate being comparatively wider. The mandible has the coronoid process with a forward trend, which is not noticed in A. planirostris.

Teeth.—Second upper premolar subquadrate in basal outline, quite different from the subpyriform tooth of A. planirostris, the internal node well developed and forming a conspicuous cusp.

First upper molar broad, deep, the anterior inner angle more developed than in A. planirostris, which species has this portion rounded. Second lower premolar very heavy and broad, the posterior internal border with the dentate ridge low. First lower molar subquadrate in outline.

Remarks.—This species is quite distinct from A. planirostris (Spix), the only species to which it is at all closely related. The large size and rather peculiar dentition will immediately distinguish it.

# Comparative measurements.

-	A.	A. planiros- tris. Chapada, Brazil.	
	No. 5,785 Eastern Peru.		Average of two specimens
Length of forearm,	65.2  ma	a. 65.1 mm.	$60  \mathrm{mm}.$
Length of tibia,	24 "	24.5 ''	21.5 "
Length of foot,	18 "	18.5 ''	16 "
Length of metacarp . (3d finger)	61.5 "	61.2 "	55 ''
Length of ear,	20 "	20.5 "	20 "
,	Skull.		
•			, planirostris No. 4,877.
Length of upper tooth row, .		12 mm.	10.5 mm.
Width across first molar,		14.5 ''	13 ''
Length of lower tooth row, .	-	12.5 ''	11 "

### Artibeus parvipes n. sp.

Type.—No. 5,494, Collection of the Academy of Natural Sciences of Philadelphia.

Santiago de Cuba, Cuba, March 15, 1892. Male. Collected and presented by Dr. Benjamin Sharp.

General Characters.—Allied to the Jamaican A. jamaicensis Leach, but differing in the smaller forearm and tibia, and the narrower and lighter built foot.

Distribution.—Specimens from Santiago province, Cuba, are all that have been examined.

Size.—General size apparently the same as jamaicensis, but the forearm and tibia are constantly smaller. The forearms of six specimens average 53.7 mm., against 58.3 mm. in six specimens

of jamaicensis. The tibiæ average 20.8 against 21.9 mm. in the same series.

Foot.—The foot is narrower and lightly built throughout, while in *jamaicensis* the foot is heavier and each toe is individually broader.

Color.—Apparently the same as jamaicensis, but no skius have been examined.

Skull.—Identical with A. jamaicensis, but very slightly smaller.

Teeth.—The second upper premolar is broader and with a heavier internal shoulder, the teeth being actually broader than jamaicensis, though the latter possesses a slightly larger skull.

Remarks.—This form is easily separated from the Jamaican animal by the lighter, slenderer foot and the shorter forearm.

Specimens Examined.—Seven alcoholic specimens.

Santiago de Cuba. One (type). The Academy of Natural Sciences of Philadelphia.

Mt. Magota, Santiago Prov., Cuba. Six. The Academy of Natural Sciences of Philadelphia.

# Comparative measurements.

				jamaicensis. No. 5,705, A. N. S. Phila. Port Antonio, Jamaica.	parvipes. Type No. 5,494, A. N. S. Phila. Santiago de Cuba.
Length of fo	rearm,			58 mm.	52.5 mm.
Length of ti				23.5 "	21.5 "
Length of fo	oot, .			15 "	14 ''
Length of ea	ar, .			18.5 "	16.5 "

A short time ago Dr. J. Percy Moore, of the University of Pennsylvania, submitted to me an alcoholic specimen of a species of *Nyctinomus* from the Bahamas. A hasty examination and comparison with available material revealed the fact that it represented a distinct form. Later, after speaking to Mr. G. S. Miller, Jr., of the U. S. National Museum, regarding the animal, he kindly turned over to me a series of skins of this species from Little Abaco, which had been submitted to him by the British Museum. A series of Cuban specimens were also forwarded which greatly facilitated comparison.

#### Nyctinomus bahamensis n. sp.

Type.—Collection of the School of Biology, University of Pennsylvania. Governor's Harbor, Eleuthera, Bahamas, November 18, 1890. Male. Collected by Dr. J. Percy Moore.

General Characters.—Closely allied to the Cuban form of the brasiliensis group, but differing in the larger size, in the shallower central emargination of the nose-pad, and the more grayish general coloration.

Distribution.—Specimens have been examined from Eleuthera and Little Abaco, Bahamas.

Size.—Apparently intermediate between cynocephalus from the mainland and the Cuban form of the brasiliensis group. The forearm is constantly longer than that of the Cuban form, which discrepancy also applies to the tail.

Head.—The nose-pad of bahamensis has the upper line almost straight, the central emargination being very shallow; in the Cuban form the emargination is much deeper and more rotundate.

Color.—Upper parts broccoli-brown, drab-gray below. The Cuban form is Prout's brown above, below drab.

Skull.—Exactly as in the Cuban form.

Remarks.—This form may be readily differentiated from the Cuban form by the length of the forearm, while the coloration on actual comparison is fairly distinctive.

Specimens Examined —One alcoholic specimen and six skins. Eleuthera. One alc (type). University of Pennsylvania. Little Abaco. Six skins. British Museum.

# Comparative measurements.

	El Guamo, Cuba.	Little Abaco, Bahamas.
	<u>.</u> 3	<u>.</u> ♂.
	No. 103,776,	No. 21,
	U. S. N. M.	Coll. J. L. Bonhote.
Total length,	85 mm.	91 mm.
Length of forearm, .	36 ''	42 ''
Length of tail,	29 ''	36 ''